

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claim 11 CANCEL claim 13 in accordance with the foregoing:

1. (Cancelled)

2. (Cancelled)

3. (Cancelled)

4. (Previously Presented) A defrosting method of a refrigerator comprising the steps of: checking whether a heat exchanger temperature sensor adapted to measure a temperature of a heat exchanger, to be defrosted, is in a normal state or in a failure state;

executing a first defrosting mode according to a first defrosting condition when it is determined that the heat exchanger temperature sensor is in the normal state; and

executing a second defrosting mode according to a second defrosting condition when it is determined that the heat exchanger temperature sensor is in the failure state;

wherein the step of executing the second defrosting mode comprises the steps of:

comparing a temperature of a storage compartment, to be cooled in accordance with an operation of the heat exchanger, with a reference temperature; and

if the temperature of the storage compartment is lower than the reference temperature, determining that a compressor and a storage compartment fan operate normally, and turning on a defrost heater adapted to defrost the heat exchanger for a predetermined time for a defrosting operation.

5. (Previously Presented) The defrosting method according to claim 4, wherein the step of executing the second defrosting mode further comprises the step of:

if the temperature of the storage compartment is not lower than the reference temperature, determining that at least one of the compressor and the storage compartment fan operates abnormally, and preventing the defrost heater from being driven to prevent the defrosting operation from being executed.

6. (Cancelled)

7. (Previously Presented) The defrosting method according to claim 4, wherein: the reference temperature is set by a maximum temperature of the storage compartment available when the compressor and the storage compartment fan operate normally.

8. (Previously Presented) A defrosting method of a refrigerator comprising the steps of: determining whether or not a heat exchanger temperature sensor adapted to measure a temperature of a heat exchanger, to be defrosted, is in a failure state;

if the heat exchanger temperature sensor is in a failure state, comparing a temperature of a storage compartment, to be cooled in accordance with an operation of the heat exchanger, with a reference temperature; and

if the temperature of the storage compartment is lower than the reference temperature, determining that a compressor and the storage compartment fan operate normally, and turning on a defrost heater adapted to defrost the heat exchanger for a predetermined time for a defrosting operation.

9. (Previously Presented) The defrosting method according to claim 8, further comprising the step of:

if the temperature of the storage compartment is not lower than the reference temperature, determining that the compressor and the storage compartment fan operate abnormally, and preventing the defrost heater from being driven to prevent the defrosting operation from being executed.

10. (Original) The defrosting method according to claim 8, wherein the failure state of the heat exchanger temperature sensor corresponds to an open-circuited or short-circuited state.

11. (Currently Amended) A refrigerator comprising:
a heat exchanger adapted to exchange heat with air in a storage compartment;
a heat exchanger temperature sensor adapted to measure a temperature of the heat exchanger;
a defrost heater adapted to perform a defrosting operation for the heat exchanger; and
a control unit adapted to execute a first defrosting mode for a defrosting time determined in accordance with a detection value of the heat exchanger temperature sensor when the heat exchanger temperature sensor is in a normal state, while executing a second defrosting mode for a defrosting time limited to a predetermined time, when the heat exchanger temperature sensor is in a failure state,

wherein the control unit determines that a compressor and a storage compartment fan operate normally, when a temperature of the storage compartment is lower than a second reference temperature, and executes the second defrosting mode, based on the determination.

12. (Previously Presented) The refrigerator according to claim 11, wherein:
the first defrosting mode is executed to drive the defrost heater until the temperature measured by the heat exchanger temperature sensor reaches a first reference temperature.

13. (Cancelled)

14. (Previously Presented) A defrosting method of a refrigerator comprising the steps of:

checking whether a heat exchanger temperature sensor adapted to measure a temperature of a heat exchanger, to be defrosted, is in a normal state or in a failure state;

executing a first defrosting mode according to a first defrosting condition when it is determined that the heat exchanger temperature sensor is in the normal state; and

executing a second defrosting mode according to a second defrosting condition when it is determined that the heat exchanger sensor is in the failure state;

wherein the step of executing the second defrosting mode comprises the steps of:

comparing a temperature of a storage compartment, to be cooled in accordance with an operation of the heat exchanger, with a reference temperature; and

if the temperature of the storage compartment is higher than the reference temperature, determining that at least one of a compressor and a storage compartment fan operates abnormally, and preventing a defrost heater adapted to defrost the heat exchanger from being driven to prevent a defrosting operation from being executed.

15. (Previously Presented) The defrosting method according to claim 14, wherein the reference temperature is set by a maximum temperature of the storage compartment available when the compressor and the storage compartment fan operate normally.